47, wherein an insertion position of at least one buffer along the plurality of conduction paths is chosen to yield a most acceptable integrated circuit timing characteristic.

REMARKS

The Examiner is thanked for his careful review of this application. Claims 1-4, 7, 18, 29, and 40 have been amended. Claims 9-13, 20-24, 31-35, and 42-46 have been cancelled. Claims 1-8, 14-19, 25-30, 36-41, and 47-48 are pending after entry of the present amendment.

Rejections under 35 U.S.C. § 112

Claims 1-48 were rejected under 35 U.S.C. 112 as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. These rejections are respectfully traversed.

Claims 1-48 were rejected under 35 U.S.C. 112 as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These rejections are respectfully traversed.

Claims 7-9, 18-20, 29-31, and 40-42 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Examiner asserts that the phrase "approximately but no more than" is ambiguous. In view of the presently amended claims, these rejections are respectfully traversed.

With respect to claims 1 and 2, the second element in each claim was previously amended to include the limitation "as determined by examination of a curve associated

with the driver." This limitation is supported by page 6, second paragraph, of the specification. Further with respect to claims 1 and 2, the third element in each claim was previously amended to include the limitation "when the total path length of conductive paths coupled to the driver exceeds a maximum acceptable length for the driver according to a minimum acceptable noise level for that given net, as determined by examination of the curve associated with the driver." This limitation is supported by page 7, second and third paragraphs, of the specification.

With respect to claims 3 and 4, the second and fifth elements in each claim were previously amended to include the limitation "as determined by examination of a curve associated with the driver." This limitation is supported by page 6, second paragraph, of the specification. Further with respect to claims 1 and 2, the sixth element in each claim was previously amended to include the limitation "when the total path length of conductive paths coupled to the driver exceeds a maximum acceptable length for the driver according to a minimum acceptable noise level for that given net, as determined by examination of the curve associated with the driver." This limitation is supported by page 7, second and third paragraphs, of the specification.

Further with respect to claims 2 and 4, the preambles were previously amended to recite "A computer readable media containing program instructions that, when executed, exercise code for minimizing noise in an integrated circuit, the computer readable media comprising:." Also, each element was previously amended to begin with the phrase "program instructions for." These amendments are supported by page 9, last paragraph, of the specification.

As introduced in the previous amendment, dependent claims 5, 8, 16, 19, 27, 30, 38, and 41 are supported by page 5, first full paragraph, of the specification.

As introduced in the previous amendment, dependent claims 6, 17, 28, and 39 are supported by page 5, second full paragraph, of the specification.

As presently amended, dependent claims 7, 18, 29, and 40 are supported by page 7, second paragraph, and page 8, third and fourth paragraphs, of the specification.

As introduced in the previous amendment, dependent claims 14, 25, 36, and 47 are supported by page 7, last paragraph, of the specification.

As introduced in the previous amendment, dependent claims 15, 26, 37, and 48 are supported by page 8, fourth and last paragraphs, of the specification.

Claims 9-13, 20-24, 31-35, and 42-46 have been cancelled by the present amendment.

Claims 7, 18, 29, and 40 have been amended to clarify that the insertion of at least one buffer in the net occurs at a position "within" the maximum acceptable length for conductive paths coupled to the driver. This amendment is supported by page 7, second paragraph, and page 8, third and fourth paragraphs, of the specification.

It is respectfully submitted that claims 1-8, 14-19, 25-30, 36-41, and 47-48, as presently amended, are described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Furthermore, it is respectfully submitted that claims 1-8, 14-19, 25-30, 36-41, and 47-48, as presently amended, do not contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Furthermore, it is respectfully submitted that claims 7-8, 18-19, 29-30, and 40-41, as presently amended, are not indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Rejections under 35 U.S.C. § 102

Claims 1-2, 7, 10-15, 29, and 32-37 were rejected under 35 U.S.C. 102(e) as being anticipated by Alpert et al. ("Alpert") (U.S. Patent No.: 6,117,182) or Tawada (U.S. Patent No.: 6,405,350). These rejections are respectfully traversed.

Claims 1-48 were rejected under 35 U.S.C. 102(b) as being anticipated by Petschauer et al. ("Petschauer") (U.S. Patent No.: 5,596,506). These rejections are respectfully traversed.

With respect to claims 1-4, neither Alpert, Tawada, nor Petschauer teach or suggest "examination of a noise amplitude versus length of conduction path curve associated with the driver" to determine if the total path length of conductive paths coupled to a driver exceed a maximum acceptable length.

The Office has referred the Applicant to a discussion of "noise slack" at column 11 of Alpert, as it relates to the recited "curve" of the presently claimed invention. The Office has also referred the Applicant to Figures 1, 4-5, 9, 14-19, and corresponding text of Tawada as anticipating the presently claimed invention. The Office has also referred the Applicant to Figures 4-9 and corresponding text of Petschauer as anticipating the presently claimed invention.

The Applicants respectfully submit that the prior art citations by the Office are not related to the "noise amplitude versus length of conduction path curve" of the present invention. Furthermore, the prior art citations by the Office neither teach nor suggest "examination of a noise amplitude versus length of conduction path curve associated with the driver." The Office has admitted that neither Alpert nor Tawada disclose that the curves define a relationship between conductor length and noise. The Office has also admitted that neither Alpert nor Tawada disclose replacement of drivers.

In view of the foregoing, the Applicants respectfully submit that each of Alpert, Tawada, and Petschauer fail to teach each and every element as required for a 35 U.S.C. 102 rejection. For at least these reasons, it is submitted that claims 1-8, 14-19, 25-30, 36-41, and 47-48 are patentable over the cited prior art of record. Therefore, the Examiner is respectfully requested to withdraw the 35 U.S.C. 102 rejections.

Rejections under 35 U.S.C. § 103

Claims 1-2, 5-15, 27-29, and 30-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over [Jones et al. ("Jones") (U.S. Patent No: 5,666,288) or Dwyer et al. ("Dwyer") (U.S. Patent No.: 6,341,365)] in view of (Applicant's Own Admission) or Oh et al. ("Oh") or Davis et al. ("Davis") or Yang et al. ("Yang") or Petschauer. These rejections are respectfully traversed.

To establish a prima facie case of obviousness, the references when combined must teach or suggest all the claim limitations. As discussed below, the Office has not established a prima facie case of obviousness because the references when combined do not teach or suggest all of the claim limitations.

With respect to claims 1 and 2, neither Jones nor Dwyer teach or suggest "examination of a noise amplitude versus length of conduction path curve associated with the driver." More particularly, neither Jones nor Dwyer teach or suggest "determining if the total path length of conductive paths coupled to a driver within said net exceed a maximum acceptable length for that given driver according to a minimum acceptable noise level for that given net, as determined by examination of a noise amplitude versus length of conduction path curve associated with the driver." Also, neither Jones nor Dwyer teach or suggest "inserting at least one buffer within said net at a position which is within the maximum acceptable length for conductive paths coupled to said driver, when

the total path length of conductive paths coupled to the driver exceeds a maximum acceptable length for the driver according to a minimum acceptable noise level for that given net, as determined by examination of the noise amplitude versus length of conduction path curve associated with the driver." Therefore, to establish a prima facie case of obviousness the rejection must rely on either the Applicant's alleged admission, Oh, Davis, Yang, or Petschauer to teach or suggest "examination of a noise amplitude versus length of conduction path curve associated with the driver."

With regard to the alleged admission by the Applicant on page 2, first paragraph, the Applicants respectfully disagree that the subject statement represents an admission of a prior art teaching or suggestion for "examination of a noise amplitude versus length of conduction path curve associated with the driver," particularly in the context of claims 1 and 2 as previously described. In one respect, the subject statement simply acknowledges the prior art technique of manually moving wires and circuits to minimize or eliminate noise problems. In another respect, the subject statement simply acknowledges the prior art technique of increasing the size of the driver supplying signals to a conductive path to minimize or eliminate noise problems. The subject statement does not teach or suggest the "examination of a noise amplitude versus length of conduction path curve associated with the driver" to determine if the total path length of conductive paths coupled to a driver exceed a maximum acceptable length.

With regard to the alleged admissions by the Applicant on page 3, last paragraph, page 9, last paragraph, and page 10, the Applicants respectfully disagree that the subject statements represent an admission of a prior art teaching or suggestion of any part of the claimed invention. Statements associated with the ability of a skilled artisan are not to be interpreted as pertaining to a skilled artisan at the time of the invention. Statements

associated with the ability of a skilled artisan are provided to indicate that the present invention should only be limited to the spirit and scope of the claims.

With regard to the alleged admission by the Applicant on page 5, first full paragraph, first sentence, the Applicants respectfully disagree that the subject statement represents an admission of a prior art teaching or suggestion for "examination of a noise amplitude versus length of conduction path curve associated with the driver," particularly in the context of claims 1 and 2 as previously described. The subject statement simply acknowledges the existence of "well-known curves for various driver circuits of noise amplitude versus the length of a conductive path coupled to that driver circuit." The statement is specific to point out that "the present invention noise analysis is performed using well-known curves." Claims 1 and 2 are directed to minimizing noise in an integrated circuit, wherein "examination of a noise amplitude versus length of conduction path curve associated with the driver" is performed to determine if the total path length of conductive paths coupled to a driver exceed a maximum acceptable length. Claims 1 and 2 are not directed to the development or creation of a noise amplitude versus length of conduction path curve for a given driver. Thus, it is an inherent requirement of the presently claimed invention that such curves exist.

With regard to the alleged admission by the Applicant on page 5, first full paragraph, second sentence, the Applicants respectfully disagree that the subject statement represents an admission of a prior art teaching or suggestion for "examination of a noise amplitude versus length of conduction path curve associated with the driver," particularly in the context of claims 1 and 2 as previously described. The subject statement simply acknowledges the existence of a relationship between driver strength and an associated conduction path's susceptibility to noise. Claims 1 and 2 are directed to minimizing noise in an integrated circuit, wherein "examination of a noise amplitude

versus length of conduction path curve associated with the driver" is performed to determine if the total path length of conductive paths coupled to a driver exceed a maximum acceptable length. Claims 1 and 2 are not directed to the discovery of a relationship between driver strength and noise on a given conduction path.

With regard to the alleged admission by the Applicant on page 6, second paragraph, lines 1-4, the Applicants respectfully disagree that the subject statement represents an admission of a prior art teaching or suggestion for "examination of a noise amplitude versus length of conduction path curve associated with the driver," particularly in the context of claims 1 and 2 as previously described. The subject statement simply acknowledges the existence of "noise amplitude versus distance data." The statement is specific to point out that the present invention noise analysis is performed using noise amplitude versus distance data. Claims 1 and 2 are directed to minimizing noise in an integrated circuit, wherein "examination of a noise amplitude versus length of conduction path curve associated with the driver" is performed to determine if the total path length of conductive paths coupled to a driver exceed a maximum acceptable length. Claims 1 and 2 are not directed to the development or creation of a noise amplitude versus distance data. Thus, it is an inherent requirement of the presently claimed invention that such data exist.

Further with respect to claims 1 and 2, neither Oh, Davis, Yang, nor Petschauer either teach nor suggest "examination of a noise amplitude versus length of conduction path curve associated with the driver" to determine if the total path length of conductive paths coupled to a driver exceed a maximum acceptable length. In following, none of the prior art reference combinations cited by the examiner can be combined to teach or suggest all of the elements and limitations of claims 1 and 2. Therefore, the Office has not established a prima facie case of obviousness because the references when combined do

not teach or suggest all of the claim limitations. For at least these reasons, the Applicants respectfully request that the rejections of independent claims 1 and 2 be withdrawn. For at least the same reasons, the Applicants respectfully submit that dependent claims 5-8, 14-15, 27-30, and 36-37 are patentable over the cited art of record.

Claims 3-4, 18, 21-26, 40, and 43-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over [Alpert or Tawada] in view of (Applicant's Own Admission) or Oh or Davis or Yang or Petschauer. These rejections are respectfully traversed.

Claims 3-4, 18, 21-26, 40, and 43-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over [Jones or Dwyer] in view of (Applicant's Own Admission) or Oh or Davis or Yang or Petschauer. These rejections are respectfully traversed.

Neither Alpert, Tawada, Jones, Dwyer, (Applicant's Own Admission), Oh, Davis, Yang, nor Petschauer, nor any combination thereof, teach or suggest "examination of a noise amplitude versus length of conduction path curve associated with the driver" to determine if the total path length of conductive paths coupled to a driver exceed a maximum acceptable length. The Applicants respectfully submit that claim 3 and 4 are patentable over the cited art of record for at the same reasons as previously given with respect to claims 1 and 2. In following, none of the prior art reference combinations cited by the examiner can be combined to teach or suggest all of the elements and limitations of claims 3 and 4. Therefore, the Office has not established a prima facie case of obviousness because the references when combined do not teach or suggest all of the claim limitations. For at least these reasons, the Applicants respectfully request that the rejections of independent claims 3 and 4 be withdrawn. For at least the same reasons, the Applicants respectfully submit that dependent claims 16-19, 25-26, 38-41, and 47-48 are patentable over the cited art of record.

The Applicants respectfully submit that all of the pending claims are in condition for allowance. A notice of allowance is respectfully requested. Otherwise, the Applicants respectfully submit that all of the pending claims are in better condition for appeal. If the Examiner has any questions concerning the present amendment, the Examiner is kindly requested to contact the undersigned at (408) 749-6903. If any additional fees are due in connection with filing this amendment, the Commissioner is also authorized to charge Deposit Account No. 50-0805 (Order No. SUNMP099). A duplicate copy of the transmittal is enclosed for this purpose.

Respectfully submitted,
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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	Docket No: SUNMP099
Sutera, et al.	Group Art Unit: 2123
Application No: 09/430,350	Examiner: Jones, H.
Filed: October 29, 1999	Date: December 3, 2002
For: METHOD FOR REDUCING NOISE IN INTEGRATED CIRCUIT LAYOUTS	

MARKED UP AMENDMENT

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MARKED UP SPECIFICATION

For page 4, third paragraph:

--[When referring to FIG. 1 and FIG. 4, it should be considered that driver and receiver labels may be substituted for one another due to the fact that some receivers can actually be drivers, vice-versa.] Referring to FIG. 1, layout 10 includes driver/receivers 12 and 14 coupled together using conductive path 16. Further included are driver/receivers 18 and 20, driver 22 and receiver 24. Driver/receiver 18 is coupled to driver/receiver 20 using conductive path segments 26 and 28. At the intersection of conductive path segments 26 and 28, a conductive path segment 30 is coupled thereto. Driver 22 and receiver 24 are coupled to conductive path segments 32 and 34 respectively. Conductive path segments 32 and 34 are further coupled to conductive path segment 30.--

For page 5, third paragraph:

--FIG. 3 is a flowchart depicting a method [of one embodiment] of the present invention.--

For page 7, first paragraph:

--If, at step 56, a larger driver was not available, the method proceeds at block 70 where a buffer is placed at a location which would increase signal levels on the net. Locations where [buffers (i.e., drivers)] drivers are placed may be thought to be locations where the previous net ends and a new net begins. Thus, a buffer is placed at a location which would cause the conductive path between the driver and the buffer to be shorter than would otherwise have occurred. Since the conductive path is shorter, there is less susceptibility to noise.--

MARKED UP CLAIMS

1. (Amended) A method for minimizing noise in an integrated circuit comprising:

choosing a net to be analyzed;

determining if the total path length of conductive paths coupled to a driver within said net exceed a maximum acceptable length for that given driver according to a minimum acceptable noise level for that given net, as determined by examination of a noise amplitude versus length of conduction path curve associated with the driver; and

inserting at least one buffer within said net at a position which is within the maximum acceptable length for conductive paths coupled to said driver, when the total path length of conductive paths coupled to the driver exceeds a maximum acceptable length for the driver according to a minimum acceptable noise level for that given net, as determined by examination of the noise amplitude versus length of conduction path curve associated with the driver.

2. (Amended) A computer readable media containing program instructions that, when executed, exercise code for minimizing noise in an integrated circuit, the computer readable media comprising:

program instructions for choosing a net to be analyzed;

program instructions for determining if the total path length of conductive paths coupled to a driver within said net exceed a maximum acceptable length for that given driver according to a minimum acceptable noise level for that given net, as determined by examination of a noise amplitude versus length of conduction path curve associated with the driver; and

program instructions for inserting at least one buffer within said net at a position which is within the maximum acceptable length for conductive paths coupled to said driver, when the total path length of conductive paths coupled to the driver exceeds a maximum acceptable length for the driver according to a minimum acceptable noise level for that given net, as determined by examination of the noise amplitude versus length of conduction path curve associated with the driver.

3. (Amended) A method for minimizing noise in an integrated circuit comprising:

choosing a net to be analyzed;

determining if the total path length of conductive paths coupled to a first driver within said net exceed a maximum acceptable length for said first driver according to a minimum acceptable noise level for said net, as determined by examination of a noise amplitude versus length of conduction path curve associated with the driver;

determining if a second driver exists which provides a stronger signal output than said first driver and which also is available to replace said first driver;

replacing said first driver with said second driver;

determining, once said first driver is replaced, if the total path length of conductive paths coupled to said second driver within said net exceed a maximum acceptable length for said second driver according to a minimum acceptable noise level for said net, as determined by examination of a noise amplitude versus length of conduction path curve associated with the second driver; and

inserting at least one buffer within said net at a position which is within the maximum acceptable length for conductive paths coupled to said driver, when the total path length of conductive paths coupled to the driver exceeds a maximum acceptable length for the driver according to a minimum acceptable noise level for that given net, as determined by examination of the noise amplitude versus length of conduction path curve associated with the driver.

4. (Amended) A computer readable media containing program instructions that, when executed, exercise code for minimizing noise in an integrated circuit, the computer readable media comprising:

program instructions for choosing a net to be analyzed;

program instructions for determining if the total path length of conductive paths coupled to a first driver within said net exceed a maximum acceptable length for said first driver according to a minimum acceptable noise level for said net, as determined by examination of a noise amplitude versus length of conduction path curve associated with the second driver;

program instructions for determining if a second driver exists which provides a stronger signal output than said first driver and which also is available to replace said first driver;

program instructions for replacing said first driver with said second driver;

program instructions for determining, once said first driver is replaced, if the total path length of conductive paths coupled to said second driver within said net exceed a maximum acceptable length for said second driver according to a minimum acceptable noise level for said net, as determined by examination of a noise amplitude versus length of conduction path curve associated with the second driver; and

program instructions for inserting at least one buffer within said net at a position which is within the maximum acceptable length for conductive paths coupled to said driver, when the total path length of conductive paths coupled to the driver exceeds a maximum acceptable length for the driver according to a minimum acceptable noise level for that given net, as determined by examination of the noise amplitude versus length of conduction path curve associated with the driver.

7. (Amended) The method for minimizing noise in an integrated circuit according to claim 1, wherein the insertion of at least one buffer within the net occurs at a position [corresponding to, approximately but no more than,] within the maximum acceptable length for conductive paths coupled to the driver, as determined by examination of the curve associated with the driver.

9. (Cancelled) [The method for minimizing noise in an integrated circuit according to claim 8, wherein the curve defines a maximum allowable noise amplitude for the net.]

10. (Cancelled) [The method for minimizing noise in an integrated circuit according to claim 1, wherein an iterative scheme is implemented such that all nets of the

integrated circuit are subjected to the method for minimizing noise in the integrated circuit.]

11. (Cancelled) [The method for minimizing noise in an integrated circuit according to claim 10, wherein an inserted buffer results in a modified downstream net configuration to be considered in subsequent iterations of the method for minimizing noise in the integrated circuit.]

12. (Cancelled) [The method for minimizing noise in an integrated circuit according to claim 1, wherein an iterative scheme is implemented such that fewer than all nets of the integrated circuit are subjected to the method for minimizing noise in the integrated circuit.]

13. (Cancelled) [The method for minimizing noise in an integrated circuit according to claim 12, wherein an inserted buffer results in a modified downstream net configuration to be considered in subsequent iterations of the method for minimizing noise in the integrated circuit.]

18. (Amended) The method for minimizing noise in an integrated circuit according to claim 3, wherein the insertion of at least one buffer within the net occurs at a position [corresponding to, approximately but no more than,] <u>within</u> the maximum acceptable length for conductive paths coupled to the driver, as determined by examination of the curve associated with the driver.

20. (Cancelled) [The method for minimizing noise in an integrated circuit

according to claim 19, wherein the curve defines a maximum allowable noise amplitude for the net.]

21. (Cancelled) [The method for minimizing noise in an integrated circuit according to claim 3, wherein an iterative scheme is implemented such that all nets of the integrated circuit are subjected to the method for minimizing noise in the integrated circuit.]

22. (Cancelled) [The method for minimizing noise in an integrated circuit according to claim 21, wherein an inserted buffer results in a modified downstream net configuration to be considered in subsequent iterations of the method for minimizing noise in the integrated circuit.]

23. (Cancelled) [The method for minimizing noise in an integrated circuit according to claim 3, wherein an iterative scheme is implemented such that fewer than all nets of the integrated circuit are subjected to the method for minimizing noise in the integrated circuit.]

24. (Cancelled) [The method for minimizing noise in an integrated circuit according to claim 23, wherein an inserted buffer results in a modified downstream net configuration to be considered in subsequent iterations of the method for minimizing noise in the integrated circuit.]

29. (Amended) The computer readable media containing program instructions that, when executed, exercise code for minimizing noise in an integrated circuit according

to claim 2, wherein the insertion of at least one buffer within the net occurs at a position [corresponding to, approximately but no more than,] within the maximum acceptable length for conductive paths coupled to the driver, as determined by examination of the curve associated with the driver.

31. (Cancelled) [The computer readable media containing program instructions that, when executed, exercise code for minimizing noise in an integrated circuit according to claim 30, wherein the curve defines a maximum allowable noise amplitude for the net.]

32. (Cancelled) [The computer readable media containing program instructions that, when executed, exercise code for minimizing noise in an integrated circuit according to claim 2, wherein an iterative scheme is implemented such that all nets of the integrated circuit are subjected to the method for minimizing noise in the integrated circuit.]

33. (Cancelled) [The computer readable media containing program instructions that, when executed, exercise code for minimizing noise in an integrated circuit according to claim 32, wherein an inserted buffer results in a modified downstream net configuration to be considered in subsequent iterations of the method for minimizing noise in the integrated circuit.]

34. (Cancelled) [The computer readable media containing program instructions that, when executed, exercise code for minimizing noise in an integrated circuit according to claim 2, wherein an iterative scheme is implemented such that fewer

than all nets of the integrated circuit are subjected to the method for minimizing noise in the integrated circuit.]

35. (Cancelled) [The computer readable media containing program instructions that, when executed, exercise code for minimizing noise in an integrated circuit according to claim 34, wherein an inserted buffer results in a modified downstream net configuration to be considered in subsequent iterations of the method for minimizing noise in the integrated circuit.]

40. (Amended) The computer readable media containing program instructions that, when executed, exercise code for minimizing noise in an integrated circuit according to claim 4, wherein the insertion of at least one buffer within the net occurs at a position [corresponding to, approximately but no more than,] within the maximum acceptable length for conductive paths coupled to the driver, as determined by examination of the curve associated with the driver.

42. (Cancelled) [The computer readable media containing program instructions that, when executed, exercise code for minimizing noise in an integrated circuit according to claim 41, wherein the curve defines a maximum allowable noise amplitude for the net.]

43. (Cancelled) [The computer readable media containing program instructions that, when executed, exercise code for minimizing noise in an integrated circuit according to claim 4, wherein an iterative scheme is implemented such that all nets of the integrated circuit are subjected to the method for minimizing noise in the integrated

circuit.]

44. (Cancelled) [The computer readable media containing program instructions that, when executed, exercise code for minimizing noise in an integrated circuit according to claim 43, wherein an inserted buffer results in a modified downstream net configuration to be considered in subsequent iterations of the method for minimizing noise in the integrated circuit.]

45. (Cancelled) [The computer readable media containing program instructions that, when executed, exercise code for minimizing noise in an integrated circuit according to claim 4, wherein an iterative scheme is implemented such that fewer than all nets of the integrated circuit are subjected to the method for minimizing noise in the integrated circuit.]

46. (Cancelled) [The computer readable media containing program instructions that, when executed, exercise code for minimizing noise in an integrated circuit according to claim 45, wherein an inserted buffer results in a modified downstream net configuration to be considered in subsequent iterations of the method for minimizing noise in the integrated circuit.]